



Database on Migrating and Extractable Food Contact Chemicals (FCCmigex)

Version 2 - Released April 2023

The FCCmigex database systematically maps the scientific evidence of food contact chemicals (FCCs) that have been measured in migrates and extracts of food contact materials and articles. It has been published in May 2022, including studies published between 1976 and May 2021.

- The first major update of the FCCmigex database was released on April 12, 2023, covering studies published between May 2021 and October 2022.
- Over 5,000 new studies were identified in literature searches. After duplicate removal, 3,735 titles & abstracts and 378 full texts were screened (Figure 1).
- This update includes 144 new studies, identifies 1,132 new food contact chemicals not previously identified and adds 4,236 new database entries to the FCCmigex database (Figure 2).

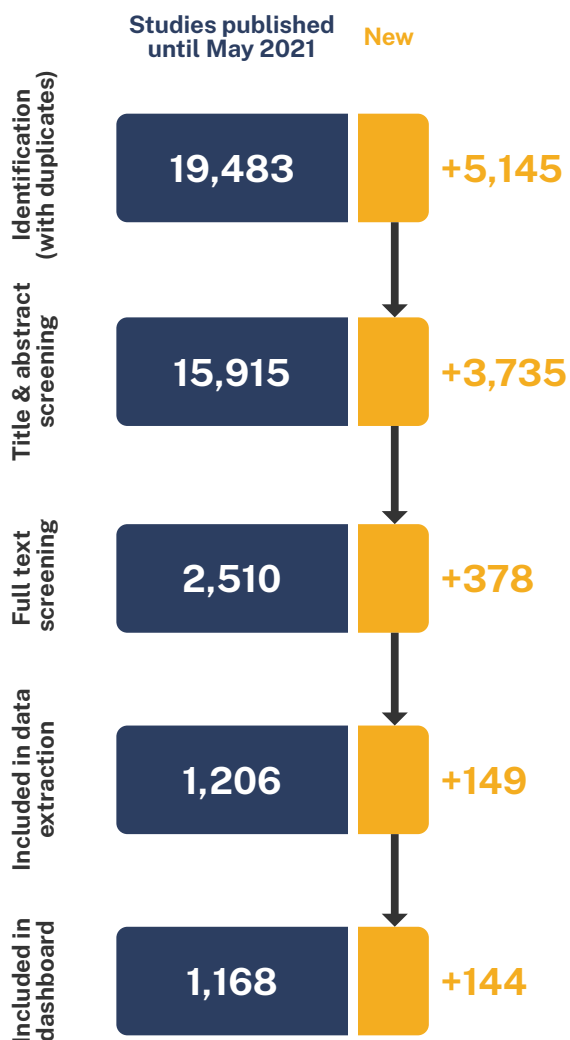


Figure 1. Flow diagram comparing this update of the FCCmigex database (yellow) with previous key numbers (dark blue) of the literature search and screening process.

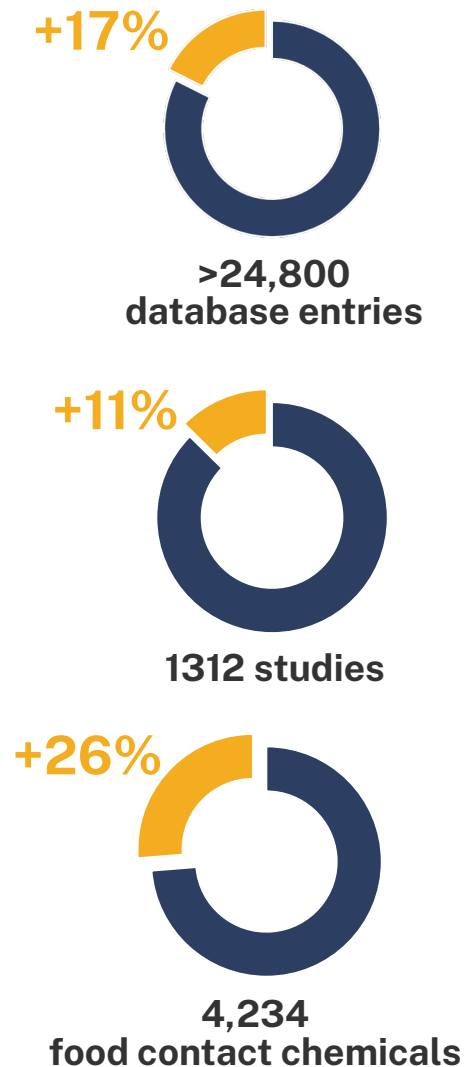


Figure 2. Newly added studies, food contact chemicals, and database entries (yellow), in comparison to the previous version of the FCCmigex database (dark blue).



Changes during literature screening

The literature database Scopus was not used anymore because we obtained a very low inclusion rate during screening of the titles and abstracts of version 1.

Changes during data extraction

Several changes were introduced to provide additional information of interest and to facilitate the data analysis. We made sure that these changes do not interfere with existing data in the database. However, we did not go back to the previous data to systematically extract and add this information from studies that have been included before. Therefore, the analysis of specific questions may require additional data extraction steps to fill in these data gaps.

- An optional field for recycled content was introduced in the data extraction form. This allowed us to mark FCMs containing recycled content, if this was explicitly mentioned in the study. We kept the two FCM main categories “recPET” and “rec paper & board” that have been used in the first version and only used the new field for FCM other than PET and paper & board.
- An optional field for biobased content was created. This field refers to biobased plastics only and allows us to label plastic FCMs using renewable feedstock, but also plastics that contain, e.g., bamboo as filler.
- An optional field on the type of chemical analysis was added to be able to select, if the FCC has been analyzed by non-targeted approaches.
- PLA was added to the list of main FCMs. In version 1, PLA was categorized as “other plastics”.

Learn more

- [Original study and supplemental material](#)
- [FCCmigex dashboard](#)
- [List of FCCs](#)
- [Protocol](#)

Access the FCCmigex
database

